LAND APPLICATION SITE

CARL D. UPSHAW JR.

CRCDU 1-17

CAROLINE COUNTY

# VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLIC	CATION AGREEMENT - E	BIOSOLIDS AND INDU	JSTRIAL RESIDUALS
until it is terminated in writing the event of a sale of one or m	yc Systems, Inc, referred to by either party or, with respec- ore parcels, until ownership anges, those parcels for whice	here as the "Permittee". of to those parcels that ar of all parcels changes. If th ownership has change	This agreement remains in effect e retained by the Landowner in ownership of individual parcels and will no longer be authorized to
Landowner: The Landowner is the owner o agricultural, silvicultural or recl documentation identifying own	amation sites identified belov	ocated in Carc line ( w in Table 1 and identified	Co. Virginia, which includes the d on the tax map(s) with county
Table 1.: Parcels autho	prized to receive biosolids, w	ater treatment residuals	or other industrial sludges
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
1 1 7			
88-A-68		, 10	
	a Skirm in Yest Indiana.	X	
☐ Additional parcels containing t	and Application Sites are identified	on Supplement A (check if app	licable)
Check one:  The Land	downer is the sole owner of the downer is one of multiple own	he properties identified he ners of the properties ide	erein. ntified herein.
than the date of the pr	date of biosolids application, r transferee of the applicable	the Landowner shall: public access and crop	management restrictions no later
The Landowner has no other a notify the Permittee immediate application or any part of this a	ly if conditions change such	that the fields are no long	ger available to the Permittee for
inspections on the land identification purpose of determining compliance.	ve and in Exhibit A. The Lar ed above, before, during or a ance with regulatory requirer	ndowner also grants pern after land application of p ments applicable to such	nission for DEQ staff to conduct ermitted residuals for the
∑ Yes □ No ☑ Yes	□ No ⊠Ye		☑ Yes ☐ No
Printed name Margarette C. Upshar By: Title* Owner	n  11 -d	y Road een, Ve. 22427 A 33-5510	ndowner Signature
*□ I certify that I have authority to	sign for the landowner as indicate	ed by my title as executor, Trus	
*☐ I certify that I am a responsible proprietorship, LLC, municipality, st		ct on behalf of the following c	orporation, partnership,
B			

#### Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed na	ame	Mailing Address	Permittee- Authorized Representative
	Susan Trumbo	PO Box 562, Remington Virginia 22734	Signature
Title	Technical Manager	Phone No. 540-547-3300	Stude

Rev 6/11/2018 Page 1 of 2

Permittee: Recyc Systems, Inc County or City: Caroline Co.
Landowner: Margarette C. Upshaw
Landowner Site Management Requirements:
I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.
I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.
I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:
<ol> <li>Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.</li> </ol>
Public Access     a. Public access to land with a high potential for public exposure shall be restricted for at least one year.
following any application of biosolids.  b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
<ul> <li>c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.</li> </ul>
<ul> <li>3. Crop Restrictions: <ul> <li>a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.</li> <li>b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,</li> <li>c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the</li> </ul> </li> </ul>
biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.  d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;  e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
<ul> <li>4. Livestock Access Restrictions: Following biosolids application to pasture or hayland sites: <ul> <li>a. Meat producing livestock shall not be grazed for 30 days,</li> <li>b. Lactating dairy animals shall not be grazed for a minimum of 60 days.</li> <li>c. Other animals shall be restricted from grazing for 30 days;</li> </ul> </li> </ul>
<ol> <li>Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;</li> </ol>
<ol> <li>Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).</li> </ol>
Margarette C. Cepilder 6-3-19
Landowner's Signature Date
Operator's Signature mailing address & phone 14 22427 Date

# VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICA	ATION AGREEMENT	- BIOSOLIDS AND I	NDUSTRIAL RESIDUALS	1
A. This land application agreemed here as "Landowner", and Recycuntil it is terminated in writing by the event of a sale of one or more identified in this agreement chan receive biosolids or industrial res	<u>c Systems, Inc.</u> referred either party or, with res re parcels, until ownershiges, those parcels for well and the parcels.	to here as the "Permitte pect to those parcels the pect to those parcels change which ownership has change	ee". This agreement remains at are retained by the Landow s. If ownership of individual r	in effect ner in parcels
Landowner: The Landowner is the owner of ragricultural, silvicultural or reclar documentation identifying owner	nation sites identified be	low in Table 1 and ider	<u>ெட</u> ் Virginia, which inclu itified on the tax map(s) with o	des the county
Table 1.: Parcels authori	zed to receive biosolids	water treatment residu	als or other industrial sludges	
Tax Parcel ID	Tax Parcel ID	Tax Parcel II	Tax Parcel II	)
88-A-67,66,660 88-A-34,57,8,10				
88-A-34,57,810				
3 7 1 1 1		A Bar		
Light Charles Agrangement of the	Leal Malana	with section after	a v Cal	
☐ Additional parcels containing Lar	nd Application Sites are identif	ied on Supplement A (check	if applicable)	
In the event that the Landowner within 38 months of the latest da 1. Notify the purchaser or t	te of biosolids application ransferee of the applica	whers of the properties art of the property to w in, the Landowner shall	identified herein. nich biosolids have been appl	
than the date of the prop 2. Notify the Permittee of the	erty transfer; and ne sale within two weeks	following property tran	sfer.	
The Landowner has no other aga notify the Permittee immediately application or any part of this aga	if conditions change such	ch that the fields are no	longer available to the Permi	ttee for
The Landowner hereby grants per agricultural sites identified above inspections on the land identified purpose of determining compliant	e and in Exhibit A. The I I above, before, during o	andowner also grants por after land application	permission for DEQ staff to co of permitted residuals for the	nduct
		od processing waste Yes ☐ No	Other industrial sludges  ☑ Yes ☐ No	
Printed name Carl D. Upshaw Sr. By: Cal White	Bowling Go Phone No. 804 -	122427 033-5510	Cal D. Abolay	1
*□ I certify that I have authority to sign				
*□ I certify that I am a responsible of proprietorship, LLC, municipality, state		o act on behalf of the follow	ing corporation, partnership,	
Permittee:  Recyc Systems, Inc., the Permitte authorized by the VPA Permit Regul prepared for each land application fir The Permittee agrees to notify the L	ation and in amounts not t eld by a person certified in	o exceed the rates identifi accordance with <u>§10.1-1</u> 0	ed in the nutrient management pl 04.2 of the Code of Virginia.	lan
specifically prior to any particular ap	plication to the Landowner	's land. Notice shall include	de the source of residuals to be a	pplied
Printed name Susan Trumbo	Mailing Addres	s mington Virginia 22734	Permittee- Authorized Representative	

540-547-3300

Technical Manager

Title

Permittee: Recyc Systems, Inc	County or City: Caroline Co.
Landowner: Carl D. Upshaw Sv.	
,	
Landowner Site Management Requirements:	
I, the Landowner, I have received a DEQ Biosolids Fact S land application of biosolids, the components of biosolids	neet that includes information regarding regulations governing the and proper handling and land application of biosolids.
I have also been expressly advised by the Permittee that to identified below must be complied with after biosolids have that I am responsible for the implementation of these practices.	he site management requirements and site access restrictions been applied on my property in order to protect public health, and cices.
I agree to implement the following site management practi of biosolids at the site:	ces at each site under my ownership following the land application
<ol> <li>Notification Signs: I will not remove any signs poste biosolids land application site, unless requested by site is completed.</li> </ol>	ed by the Permittee for the purpose of identifying my field as a the Permittee, until at least 30 days after land application at that
following any application of biosolids.	for public exposure shall be restricted for at least one year
any application of biosolids. No biosolids	for public exposure shall be restricted for at least 30 days following amended soil shall be excavated or removed from the site during provisions are made to prevent public exposure to soil, dusts or
<ul> <li>c. Turf grown on land where biosolids are ap</li> </ul>	plied shall not be harvested for one year after application of done ither land with a high potential for public exposure or a lawn,
shall not be harvested for 14 months after b. Food crops with harvested parts below the	e surface of the land shall not be harvested for 20 months after the
months prior to incorporation into the soil, c. Food crops with harvested parts below the	remain on the land surface for a time period of four (4) or more a surface of the land shall not be harvested for 38 months when the time period of less than four (4) months prior to incorporation.
<li>d. Other food crops and fiber crops shall not</li>	be harvested for 30 days after the application of biosolids; lays after the application of biosolids (60 days if fed to lactating
Livestock Access Restrictions:     Following biosolids application to pasture or had a. Meat producing livestock shall not be graze.	ayland sites:
<ul><li>a. Meat producing livestock shall not be graze</li><li>b. Lactating dairy animals shall not be graze</li><li>c. Other animals shall be restricted from gra</li></ul>	d for a minimum of 60 days.
residuals applications such that the total crop need	cations will be coordinated with the biosolids and industrial s for nutrients are not exceeded as identified in the nutrient in accordance with §10.1-104.2 of the Code of Virginia;
<ol> <li>Tobacco, because it has been shown to accumular years following the application of biosolids or indus pounds/acre (0.5 kilograms/hectare).</li> </ol>	e cadmium, should not be grown on the Landowner's land for three trial residuals which bear cadmium equal to or exceeding 0.45
Cal D. Arola h	6/5/19
Landowner's Signature	Date
	u u u
Operator's Signature mailing ad	dress & phone Va 22 707 Date
1300	of Green, Va 32 To

# VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI:	LAND	<b>APPLICATION</b>	AGREEMENT	- BIOSOLIDS	AND	INDUSTRIAL	RESIDITALS
	_,,,,	/ II / LIO/ II / O/ I	~ CIVE CIVE III	- DIOOCLIDO	$\neg$	"" DOO! INAL	NESIDUALS

A. This land application agree here as "Landowner", and Re until it is terminated in writing the event of a sale of one or ridentified in this agreement chreceive biosolids or industrial	cyc Systems, Inc. referred by either party or, with res nore parcels, until owners nanges, those parcels for	to here as the "Permitted spect to those parcels tha hip of all parcels changes which ownership has cha	e". This agreement remains it are retained by the Landow . If ownership of individual p	n effect ner in arcels
Landowner: The Landowner is the owner agricultural, silvicultural or reddocumentation identifying ow	lamation sites identified b	elow in Table T and ident	<u>Co.</u> , Virginia, which includified on the tax map(s) with c	les the ounty
Table 1.: Parcels auth	orized to receive biosolid	s, water treatment residua	ls or other industrial sludges	
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	
88-1-B			1.23 80	t .
88-A-3,4,5,10		×		
88-A-55	un i Caracia	L King to a		
☐ Additional parcels containing	Land Application Sites are ident	tified on Supplement A (check if	applicable)	
	downer is the sole owner adowner is one of multiple			
than the date of the p	date of biosolids application transferee of the application	ion, the Landowner shall: able public access and cr	op management restrictions r	
The Landowner has no other notify the Permittee immediat application or any part of this	ely if conditions change si	uch that the fields are no l	onger available to the Permit	tee for
The Landowner hereby grant agricultural sites identified ab inspections on the land identipurpose of determining comp	ove and in Exhibit A. The fied above, before, during liance with regulatory requ	Landowner also grants p or after land application our uirements applicable to su	ermission for DEQ staff to co of permitted residuals for the och application.	nduct
Class B biosolids   Water t     ☒ Yes   ☒ No   ☒ Yes		Food processing waste ⊠Yes □ No	Other industrial sludges  ☑ Yes ☐ No	
Printed name Edwin T. Upshaw  By:  Title* Owner	Mailing Address 2333 Bag Bowling C Phone Noz 84.	Green, Va. 22427 633-5803	Edwin T Upskaw [	4
*□ I certify that I have authority t  *□ I certify that I am a responsible				
proprietorship, LLC, municipality,				
Permittee: _Recyc Systems, Inc_, the Perm	uittee, agrees to apply biosoli	ds and/or industrial residuals	on the Landowner's land in the	manner

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

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Printed nam	ne .	Mailing Address	Permittee- Authorized Representative
	Susan Trumbo	PO Box 562, Remington Virginia 22734	Signature
Title	Technical Manager	Phone No. 540-547-3300	Columbia Columbia

Rev 6/11/2018 Page 1 of 2

Permittee: Recyc Systems, Inc Landowner: Edwin T. Upshow ((())  Landowner Site Management Requirements:  I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.  I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.  I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:  1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.  2. Public Access  a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.  b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;  c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested by DEQ.  3. Crop Restrictions:  a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids remain on the land surface of the land shall not be harvested for 20 months after the application of biosolids remain
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<ul> <li>a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.</li> <li>b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;</li> <li>c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.</li> <li>3. Crop Restrictions: <ul> <li>a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.</li> <li>b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,</li> <li>c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.</li> <li>d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;</li> <li>e. Feed crops shall not be harvested for 30 days after the application of biosolids;</li> </ul> </li> </ul>
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<ul> <li>c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.</li> <li>3. Crop Restrictions: <ul> <li>a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.</li> <li>b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,</li> <li>c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.</li> <li>d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;</li> <li>e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating)</li> </ul> </li> </ul>
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biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.  d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids; e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating
<ul> <li>4. Livestock Access Restrictions: Following biosolids application to pasture or hayland sites: <ul> <li>a. Meat producing livestock shall not be grazed for 30 days,</li> <li>b. Lactating dairy animals shall not be grazed for a minimum of 60 days.</li> <li>c. Other animals shall be restricted from grazing for 30 days;</li> </ul> </li> </ul>
5 Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
<ol> <li>Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).</li> </ol>
Edwin T Upshow III 6.6-19
Landowner's Signature Date
Edwart Upshaw III Bowling Green Va 6-6-19
Operator's Signature mailing address & phone 22427 Date

# **FARM DATA SHEET**

SITE NAME:	Carl D. U	lpshaw, Jr.	COUNTY:		Caroline	
OWNER:	See List	Below	OPERATOR:		Carl D. Upsha	w, Jr.
OWNER'S	See List	Below	OPERATOR'S		23035 Bagby	Road
ADDRESS:			ADDRESS:		Bowling Gree 22427	n, VA
OWNER'S TELEPHONE:	See List l	Below	OPERATOR'S T	ELEPHONE:	804-633-5510	
GENERAL FARM TYPE:	Row Cro	ps/ Pasture	CELL PHONE:		804-994-3433	
# CATTLE:	50		EMAIL:		35	
LAGOON or SLURRY:	None		LATITUDE:		F 1-10, 12-14 F 11 F 15-17	37.943
TOPO QUAD:	Sparta		LONGITUDE:		F 1-10, 12-14 F 11 F 15-17	
COMMENTS:			METHOD OF DETERMINATION	ON:	Online Maps	
Fields 1-6, Margarette C. U 23035 Bagby Bowling Green, V	Jpshaw Road	Carl D. U <sub>l</sub> 23035 Ba Bowling Gree	-9, 11-17 pshaw, Jr. igby Road en, VA 22427 i3-5510	Edwir 2333 Bowling	elds 15-17 n T. Upshaw III 3 Bagby Road Green, VA 224 4-633-5510	

# Field Changes Carl D Upshaw Jr Caroline County

New Field	Old Field
CRCDU-01	CRCDU-09
CRCDU-02	CRCDU-10
CRCDU-03	CRCDU-11
CRCDU-04	CRCDU-07
CRCDU-05	CRCDU-12
CRCDU-06	CRCDU-10
CRCDU-07	CRCDU-08
CRCDU-08	CRCDU-15
CRCDU-09	CRCDU-14
CRCDU-10	CRCDU-13
CRCDU-11	CRCDU-23
CRCDU-12	CRCDU-16
CRCDU-13	CRCDU-18
CRCDU-14	CRCDU-19
CRCDU-15	CRCDU-06
CRCDU-16	CRCDU-05
CRCDU-17	CRCDU-05

# RECYC SYSTEMS, INC FIELD DATA SHEET

Field	Gross	Environmentally Sensitive Soils					Tax	FSA
Identification	Acres	Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood	Hydro Map	<b>M</b> ap #	Tract#
CRCDU-01	19.0		=		· ·	YO 53	88-A-68	T 3589 F 1
CRCDU-02N	3.9	<b>a</b>	=	i (E	ē	YO 53	88-A-68	T 3589 F 2
CRCDU-03N	18.9	1A DecApr. 4A NovJuly	-		4A DecJune	YO 53	88-A-68	T 3589 F 3
CRCDU-04N	20.3	æs	æ	æ	-	YO 53	88-A-68	T 3589 F 4
CRCDU-05N	12.5		. <del></del>		· ·	YO 53	88-A-67 88-A-68	T 3589 F 5
CRCDU-06N	4.1	(ii)		В	T.	YO 53	88-A-68	T 3589 F 6
CRCDU-07N	9.0	<b>2</b> 6	-	(A)		YO 53	88-A-67 88-A-66	T 3589 F 7
CRCDU-08N	9.5	딱/	<u>120</u>	<u> </u>	<u> </u>	YO 53	88-A-67	T 3589 F 8
CRCDU-09N	22.5	21	w.	9	2	YO 53	88-A-67	T 3589 F 9
CRCDU-10N	7.0	1A DecApr.	4	:#:		YO 53	88-A-68	T 3589 F 10

Field	Gross	Enviro	nmentally	Sensitiv	e Soils		Tax	FSA
Identification	Acres	Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood	Hydro Map	Map#	Tract#
CRCDU-11N	11.1	4A NovJuly		(a)	4A DecJune	YO 53	88-A-67	T 3589 F 17
CRCDU-12N	5.6	<u> </u>	<b>.</b>	-	F	YO 53	88-A-66	T 3777 F 4
CRCDU-13N	9.2	2	8	-=1	~	YO 53	88-A-66	T 3777 F 3
CRCDU-14N	8.1	Ħ	<b>2</b>		~	YO 53	88-A-66 88-A-66C	T 3777 F 2
CRCDU-15N	63.1	#	-	-	~	YO 53	88-A-3	T 3585 F 1
CRCDU-16N	22.9	-		1	-	YO 53	88-A-4	T 3588 F 1
CRCDU-17N	3.5	-		1	स	YO 53	88-A-4	T 3587 F 1
TOTAL ACRES IN SITE	250.2							

5/22/2020

# VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

#### **Landowner Coordination Form**

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A Land Application Agreement-Biosolids and Industrial Residuals from original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee:

Recyc Systems, Inc

Site Name:

Carl D. Upshaw

County or City:

Caroline Co.

Please Print

Signature not required on this page

Tax Parcel ID(s)	<u>Landowners (s)</u>
88-A-68	Margarette C. Upshaw
88-A-66	Carl Douglas Upshaw, Jr.
88-A-66C	Carl Douglas Upshaw, Jr.
88-A-67	Carl D. Upshaw, Jr.
88-A-3	Edwin T. Upshaw III and Carl D. Upshaw, Jr.
88-A-4	Edwin T. Upshaw III and Carl D. Upshaw, Jr.
-	

Page 1 of 2

Report Number: 18-029-0741

Send To: Recyc Systems Inc

Susan Trumbo

8455 Whiteshop Road Culpepper VA 22701

**Account Number: 70594** 



7621 Whitepine Road, Richmond, VA 23237 Main 804-743-9401 o Fax 804-271-6446 www.waypointanalytical.com

"Every acre...Every year."™

Grower: Carl D Upshaw

**SOIL ANALYSIS REPORT** 

Analytical Method(s):

SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 01/20/2019

Date Of Analysis: 01/30/2018

Date Of Report: 01/30/2018

Date Received: 0	1/23/2010		Date Of 7	maryoro.	01/30/2010			teport. 01/30/2								
		OM	W/V	ENR		Phosphoru	JS		Potassium	Magnesium	Calcium	Sodium	р	H	Acidity	C.E.C
Sample ID Field ID	Lab Number	% Rate	Soil Class	lbs/A	M3 <sub>ppm</sub> Rate	ppm Ra	ate	<sub>ppm</sub> Rate	K <sub>ppm</sub> Rate	Mg <sub>ppm</sub> Rate	Ca <sub>ppm</sub> Rate	Na <sub>ppm</sub> Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
* 4	23998	1.9 L		81	67 H				56 L	37 L	852 VH		6.9		0.1	4.8
× 3	24000	2.0 L		84	155 VH				65 L	59 M	635 H		6.3	6.88	0.5	4.3
24 11	24001	2.2		87	206 VH				83 M	82 M	682 H		6.5		0.3	4.6

		Percei	nt Base	Saturati	on	Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	
7	3.0	6.4	88.8		2.1									
11	3.9	11.4	73.8		11.6									
23	4.6	14.9	74.1		6.5					V				

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: Pauric Me George

Pauric McGroary

Page 3 of 3

**Report Number: 19-015-0661** 

Account Number: 70594



7621 Whitepine Road, Richmond, VA 23237 Main 804-743-9401 ° Fax 804-271-6446 www.waypointanalytical.com

Send To: Recyc Systems Inc

Susan Trumbo

8455 Whiteshop Road Culpepper VA 22701

"Every acre...Every year."™

Grower: Carl Upshaw

#### **SOIL ANALYSIS REPORT**

Analytical Method(s):

SMP Buffer pH

Mehlich 3 Loss On Ignition

Water pH

Date Received: 01/15/2019

Date Of Analysis: 01/16/2019

Date Of Report: 01/16/2019

		OM	W/V	ENR		Phosphorus		Potassium	Magnesium	Calcium	Sodium	р	Н	Acidity	C.E.C
Sample ID Field ID	Lab Number	% Rate	Soil Class	lbs/A	M3 <sub>ppm</sub> Rate	ppm Rate	ppm Rate	K <sub>ppm</sub> Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
14 9	21600	2.4 L		92	52 H			75 M	34 L	554 M		5.8	6.85	0.8	4.0

		Perce	nt Base	Saturati	on	Nitrate	Sulfur		Zin	С	Manga	nese	Iron	Copper	Boron	Soluble Salts	
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Ra	ate	Zr ppm	n Rate	Mr ppm	n Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	
14	4.8	7.1	69.3		20.0				4.2	Н	13	М					

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

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This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: Pauric Mc George

Pauric McGroary

**Date Received:** 01/15/2019

Date Of Report: 01/16/2019

# **SOIL FERTILITY RECOMMENDATIONS**

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N Ib/A	Phosphate P <sub>2</sub> O <sub>5</sub> Ib/A	Potash K <sub>2</sub> O lb/A	Magnesium Mg Ib/A	Sulfur S Ib/A	Zinc Zn lb/A	Manganese Mn Ib/A	Iron Fe Ib/A	Copper Cu lb/A	Boron B Ib/A
14	Adjust pH to 6.5	0	1.3				18			2			

#### Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Page 1 of 3

**Report Number: 19-015-0661** 

Account Number: 70594



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Send To: Recyc Systems Inc

Susan Trumbo

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#### **SOIL ANALYSIS REPORT**

Analytical Method(s):

SMP Buffer pH Mehlich 3 Loss On Ignition

Date Received: 01/15/2019

Date Of Analysis: 01/16/2019

Date Of Report: 01/16/2019

		ОМ	W/V	ENR		Phosphorus	ŭ.	Potassium	Magnesium	Calcium	Sodium	p	Н	Acidity	C.E.C
Sample ID Field ID	Lab Number	% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
4A	21595	2.9 M		101	104 VH	9	17	₹78 M	56 L	649 M	6	5.8	6.84	0.9	4.8
4B	21596	2.2 L		89	53 H	)		75 M	26 VL	587 H	(	6.4	6.90	0.3	3.6
16,17	21597	2.9 M		101	32 M			51 VL	41 L	820 H		6.3	6.88	0.5	5.1
× 7	21598	2.6 M		93	123 VH			50 VL	55 L	1069 VH		6.7		0.3	6.2
火 5	21599	2.6 M		95	79 H			109 H	34 VL	736 H		6.0	6.85	0.8	5.0

		Perce	nt Base	Saturati	on	Nitrate	Sulfur	Zìr	ıc	Manga	пеѕе	Iron		Copper	Boron	Soluble Salts	
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Rate	Zi ppm		Mı ppm		Fe ppm Ra	ate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	
4A	4.2	9.7	67.6		18.8			6.3	Н	19	М						
4B	5.3	6.0	81.5		8.3			3.4	М	27	Н		Ì				
5	2.6	6.7	80.4		9.8			2.2	L	15	М						
8	2.1	7.4	86.2		4.8			4.2	Н	13	М		Ì				
12	5.6	5.7	73.6		16.0			3.8	Ħ	13	М						

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: Pauric Me George

#### THE PLANNER IS NOT STATE CERTIFIED

# Nutrient Management Plan Balance Sheet (Fall, 2019-Winter, 2021) Carl D. Upshaw, Jr. Planner: John Doe

Tract: 3585

**Location: Caroline** 

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr,	Crop	Needs N-P-K (Ibs/ac)	Leg /Man Resid	Manure/BiosId Rate & Type (season)	(d)	Man/Bios N-P-K (Ibs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1/CRCDU 15(N)	63/63	2019 2020	Wheat (grain)	100-60-60	0/0				100-60-60	N/A			

**Commercial Application Methods:** 

br - Broadcast ba - Banded sd - Sidedress

Tract: 3587 Location: Caroline (N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (Ibs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Р	Commercial N-P-K (lbs/ac)	Notes
1/CRCDU 17(N)	4/4	2019	Wheat (grain)	100-60-60	0/0				100-60-60	N/A		
		2020	(800)3000 000	CHICENSTING								

Commercial Application Methods: br - Broadcast ba - Banded sd - Sidedress

Tract: 3588 Location: Caroline
(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)		Manure/Biosld Rate & Type (season)	(d)	Man/Bios N-P-K (Ibs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
1/CRCDU 16(N)	23/23	2019 2020	Wheat (grain)	100-60-60	0/0				100-60-60	N/A		

Commercial Application Methods: br - Broadcast ba - Banded sd - Sidedress

Tract: 3589

**Location: Caroline** 

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (Ibs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	(d)	Man/Bios N-P-K (Ibs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
1/CRCDU 1(N)	19/19	2019 2020	Wheat (grain)	100-60-60	20/0				80-60-60	N/A		
2/CRCDU 2(N)	4/4	2019	Grass Pasture	50-30-40	0/0				50-30-40	N/A		
3/CRCDU 3(N)	19/19	2019	Wheat (grain)	100-60-60	0/0				100-60-60	N/A		
		2020										
4/CRCDU 4(N)	20/20	2019	Wheat (grain)	100-60-60	20/0				80-60-60	N/A		
		2020		44 (44 (44)								
5/CRCDU 5(N)	13/13	2019	Wheat (grain)	100-60-60	0/0				100-60-60	N/A		
		2020										
6/CRCDU 6(N)	4/4	2019	Grass Pasture	50-30-40	0/0				50-30-40	N/A		
7/CRCDU 7(N)	9/9	2019	Wheat (grain)	100-60-60	20/0				80-60-60	N/A		
		2020										
8/CRCDU 8(N)	10/10	2019	Grass Pasture	50-80-80	0/0				50-80-80	N/A		
9/CRCDU 9(N)	23/23	2019	Wheat (grain)	100-60-60	0/0				100-60-60	N/A		
		2020		AR THE RE								
10/CRCDU 10(N)	7/7	2019	Fescue grass hay mt.	90-80-170	0/0				90-80-170	N/A		
17/CRCDU 11(N)	11/11	2019	Wheat (grain)	100-60-60	0/0				100-60-60	N/A		
		2020										

Commercial Application Methods: br - Broadcast ba - Banded sd - Sidedress

Tract: 3777

**Location: Caroline** 

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/BiosId Rate & Type (season)	(d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
4/CRCDU 12(N)	6/6	2019 2020	Wheat (grain)	100-60-60	20/0				80-60-60	N/A			
3/CRCDU 13(N)	9/9	2019 2020	Wheat (grain)	100-60-60	20/0			-6	80-60-60	N/A			
2/CRCDU 14(N)	8/8	2019 2020	Wheat (grain)	100-60-60	20/0				80-60-60	N/A			

Commercial Application Methods: br - Broadcast ba - Banded sd - Sidedress

# Soil Test Summary

Tract	Field	Acre	Date	P2O5	K20	Lab	Soil pH	Lime Date	rec. lime tons/Ac
3585	CRCDU 15	63	[No Test]				,,,,,		
3587	CRCDU 17	4	[No Test]						
3588	CRCDU 16	23	[No Test]						
3589	CRCDU 1	19	[No Test]						
3589	CRCDU 2	4	[No Test]						
3589	CRCDU 3	19	[No Test]						
3589	CRCDU 4	20	[No Test]						
3589	CRCDU 5	13	[No Test]						
3589	CRCDU 6	4	[No Test]						×
3589	CRCDU 7	9	[No Test]						
3589	CRCDU 8	10	[No Test]						
3589	CRCDU 9	23	[No						
3589	CRCDU 10	7	Test] [No						
3589	CRCDU 11	11	Test] [No						
3777	CRCDU 12	6	Test] [No						
3777	CRCDU 13	9	Test] [No						
3777	CRCDU 14	8	Test] [No Test]						

# Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
3585	3585/1	CRCDU 15	63	Kempsville	Illa	ill .	Not Suited	11	
3587	3587/1	CRCDU 17	4	Kempsville	Illa		Not Suited	5. <b>H</b>	
3588	3588/1	CRCDU 16	23	Kempsville	Illa	11	Not Suited	(H)	
3589	3589/1	CRCDU 1	19	Kempsville	Illa	II	Not Suited	III	
12	3589/2	CRCDU 2	4	Kempsville	Illa	II	Not Suited	Ш	
	3589/3	CRCDU 3*	19	Bojac1	IIIb	П	Ш	Ш	High Leaching, Poor Drain
	3589/4	CRCDU 4	20	Kempsville	Illa	II	Not Suited	Ħ	
	3589/5	CRCDU 5	13	Kempsville	Illa	II	Not Suited	III	
	3589/6	CRCDU 6	4	Kempsville	IIIb	II	Not Suited	III	
	3589/7	CRCDU 7	9	Kempsville	Illa	П	Ш	II	
	3589/8	CRCDU 8	10	Kempsville	Illa	11	Not Suited	11	
	3589/9	CRCDU 9	23	Kempsville	Illa	II	Not Suited	III	
	3589/10	CRCDU 10	7	Altavista	lla	1	Ш	II	
	3589/17	CRCDU 11*	11	Bojac1	IVb	Ü,	Not Suited	III	High Leaching, Poor Drain
3777	3777/4	CRCDU 12*	6	Kempsville	Illa	11	Not Suited	111	High Leaching, High Slope
	3777/3	CRCDU 13	9	Kempsville	lila	II	Not Suited	III	
	3777/2	CRCDU 14	8	Kempsville	Illa	II	Not Suited	II	

<sup>\*</sup> Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applicaions.

Field Productivity	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
Group					
	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

# **Farm Summary Report**

**New Plan** Fall, 2019 - Winter, 2021 Plan:

Carl D. Upshaw, Jr. Farm Name:

Caroline Location: Specialist: John Doe N-based Acres: 250.2 P-based Acres: 0.0

Tract Name: 3585 FSA Number: 3585

Location: Caroline

CRCDU 15 Field Name:

63.10 Usable Acres: 63.10 Total Acres:

FSA Number: 3585 Tract:

Location:

Caroline Hydrologic Group: Slope Class: В В

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

Ρ Κ DATE PH Lab

[NO TEST]

Soils:

PERCENT **SOIL SERIES** SYMBOL Emporia Kempsville 37 11A Emporia Kempsville 11B 41 Kempsville Slagle 12 21C

Slagle 10 22A

## Field Warnings:

Tract Name: 3587 FSA Number: 3587

Caroline Location:

**CRCDU 17** Field Name:

Usable Acres: 3.50 Total Acres: 3.50

FSA Number: 1 Tract: 3587

Caroline Location:

Slope Class: С Hydrologic Group: С

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

Ρ DATE PH Κ Lab

[NO TEST]

Soils:

**PERCENT** SYMBOL **SOIL SERIES** 11B Emporia Kempsville 48 Kempsville Slagle

52 21C

Field Warnings:

**Tract Name:** 3588 FSA Number: 3588

Caroline Location:

Field Name: **CRCDU 16**  Total Acres:

22.90

Usable Acres: 22.90

Tract:

FSA Number: 1 3588

Location:

Caroline

Slope Class:

С

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE

PH Р Κ

Lab

[NO TEST]

Soils:

**PERCENT** 

SYMBOL

SOIL SERIES

48

21C 11B

Kempsville Slagle

52

3589

Emporia Kempsville

Field Warnings:

Tract Name:

FSA Number: 3589

Location:

Caroline

Field Name:

CRCDU 1

Total Acres:

19.00 Usable Acres: 19.00

FSA Number: 1

Tract:

Location:

3589

Caroline

Slope Class:

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

С

P-Index Summary N-based Phosphorus Limit r

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE PH P K Lab
[NO TEST]

Soils:

PERCENT SYMBOL SOIL SERIES

13 10E Emporia Kempsville Remlik
49 11B Emporia Kempsville
16 11C Emporia Kempsville
23 21C Kempsville Slagle

# Field Warnings:

Field Name: CRCDU 2

Total Acres: 3.90 Usable Acres: 3.90

FSA Number: 2 Tract: 3589

Location: Caroline

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft Distance to stream: 0 ft

#### Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE PH P K Lab

[NO TEST]

Soils:

**PERCENT SOIL SERIES** SYMBOL Emporia Kempsville 11B 51 Emporia Kempsville 49 11C

## Field Warnings:

Field Name:

**CRCDU 3** 

Total Acres:

18.90 Usable Acres: 18.90

FSA Number:

3

С

Tract:

3589

Location:

Caroline

Slope Class:

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE

Ρ

K

Lab

[NO TEST]

PΗ

Soils:

PERCENT SYMBOL **SOIL SERIES** 

29 11

Altavista 1A

4A

Bibb Chastain

45

5B

Bojac1

15

10E

Emporia Kempsville Remlik

# Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with high potential for subsurface lateral flow based on soil texture and poor drainage

Soils with perent slope in excess of 15%

Field Name:

**CRCDU 4** 

Total Acres:

20.30 Usable Acres: 20.30

FSA Number:

Tract:

3589 В

Location:

Caroline

Slope Class:

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE

Р PH

Κ

Lab

[NO TEST]

Soils:

PERCENT **SYMBOL**  **SOIL SERIES** 

86

Emporia Kempsville 11B

11

21C Kempsville Slagle

Slagle 22B

Field Warnings:

Field Name:

CRCDU 5

Total Acres:

12.50 Usable Acres: 12.50

5

FSA Number:

Tract:

3589

Location:

Caroline

Slope Class:

В

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE PH P K Lab [NO TEST]

Soils:

PERCENT SYMBOL SOIL SERIES
4 10E Emporia Kempsville Remlik
81 11B Emporia Kempsville
15 11C Emporia Kempsville

Field Warnings:

Field Name: CRCDU 6

Total Acres: 4.10 Usable Acres: 4.10

FSA Number: 6 Tract: 3589

Location: Caroline

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE PH P K Lab

[NO TEST]

Soils:

PERCENT SYMBOL SOIL SERIES

10 10E Emporia Kempsville Remlik

30 11B Emporia Kempsville

61 11C Emporia Kempsville

# Field Warnings:

Field Name: CRCDU 7

Total Acres: 9.00 Usable Acres: 9.00

FSA Number: 7 Tract: 3589

Location: Caroline

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

## Soil Test Results:

DATE PH P K Lab

[NO TEST]

# Soils:

PERCENT	SYMB	OL SOIL SERIES
2	11A	Emporia Kempsville
67	11B	Emporia Kempsville
2	21C	Kempsville Slagle
30	22B	Slagle

## Field Warnings:

Field Name:

**CRCDU 8** 

Total Acres:

Usable Acres: 9.50 9.50

FSA Number:

8

Tract:

3589

С

Location:

Caroline

Slope Class:

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

## Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE

Р PH

Κ

Lab

[NO TEST]

Soils:

**PERCENT** 

SYMBOL **SOIL SERIES** Kempsville Slagle

36

21C

11B

38

Emporia Kempsville

26

10E

Emporia Kempsville Remlik

# Field Warnings:

Field Name:

CRCDU 9

Total Acres:

22.50 Usable Acres: 22.50

FSA Number:

9

Tract: Location: 3589

Slope Class:

Caroline

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft P-Index Summary N-based Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method Soil Test Results: Ρ Κ Lab DATE PH [NO TEST] Soils: **PERCENT** SYMBOL **SOIL SERIES** Emporia Kempsville Remlik 20 10E Emporia Kempsville 80 11B Field Warnings: CRCDU 10 Field Name: Usable Acres: 7.00 Total Acres: 7.00 FSA Number: 10 3589 Tract: Caroline Location: Slope Class: В Hydrologic Group: С Riparian buffer width: 0 ft Distance to stream: 0 ft Conservation Practices: Pasture (>75% cover) P-Index Summary N-based Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

K

Lab

Soil Test Results:

PH

Ρ

DATE

# [NO TEST]

Soils:

PERCENT SYMBOL SOIL SERIES 40 11B Emporia Kempsville

60 1A Altavista

# Field Warnings:

Field Name: CRCDU 11

Total Acres: 11.10 Usable Acres: 11.10

FSA Number: 17 Tract: 3589

Location: Caroline

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE PH P K Lab

[NO TEST]

Soils:

PERCENT SYMBOL SOIL SERIES

7 4A Bibb Chastain

88 5B Bojac1

5 10E Emporia Kempsville Remlik

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with high potential for subsurface lateral flow based on soil texture and poor drainage

Soils with perent slope in excess of 15%

**Tract Name: 3777** FSA Number: 3777

Location:

Caroline

Field Name:

CRCDU 12

Total Acres: 5.60

Usable Acres: 5.60

FSA Number: 4

Tract:

3777

Location:

Caroline

Slope Class: D

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE

Р

Κ

Lab

[NO TEST]

PΗ

Soils:

PERCENT

SYMBOL SOIL SERIES

45

10E Emporia Kempsville Remlik

55

11B Emporia Kempsville

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

#### Soils with perent slope in excess of 15%

Field Name:

**CRCDU 13** 

Total Acres:

Usable Acres: 9.20 9.20

FSA Number: 3

С

Tract:

3777

Location:

Caroline

Slope Class:

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE

PΗ

Ρ

Κ

Lab

[NO TEST]

Soils:

PERCENT

SYMBOL

**SOIL SERIES** 

23

Emporia Kempsville Remlik 10E

17 53 11A 11B

Emporia Kempsville Emporia Kempsville

7

21C

Kempsville Slagle

Field Warnings:

Field Name:

**CRCDU 14** 

Total Acres:

Usable Acres: 8.10 8.10

FSA Number: 2

3777 Tract:

Location:

Caroline

Slope Class:

Hydrologic Group:

В

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

#### Soil Test Results:

DATE	PH	Р	K	Lab		
	[NO TEST]					

#### Soils:

PERCENT	SYMBO	OL SOIL SERIES
3	10E	Emporia Kempsville Remlik
66	11A	Emporia Kempsville
5	11B	Emporia Kempsville
19	21C	Kempsville Slagle
7	22A	Slagle

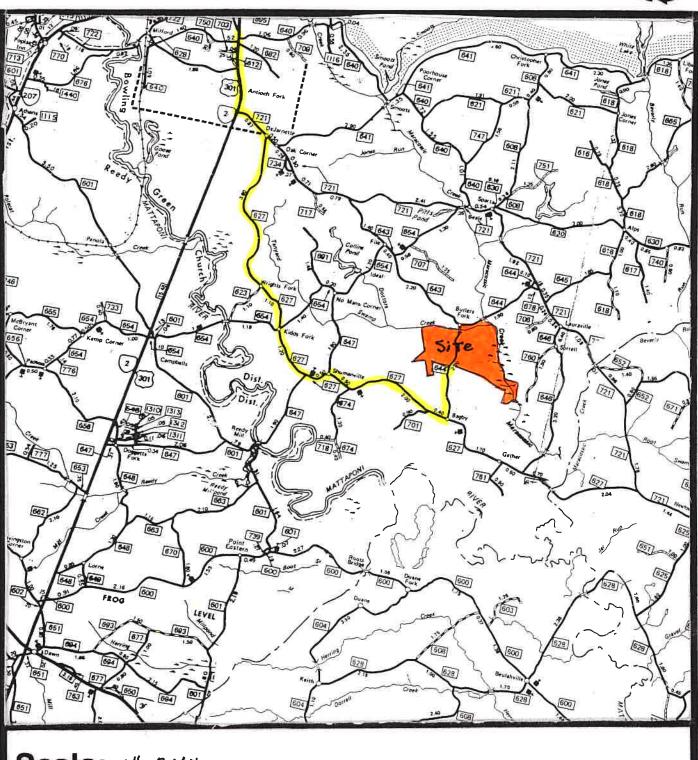
#### Field Warnings:

## MAPS

# Recyc Systems...

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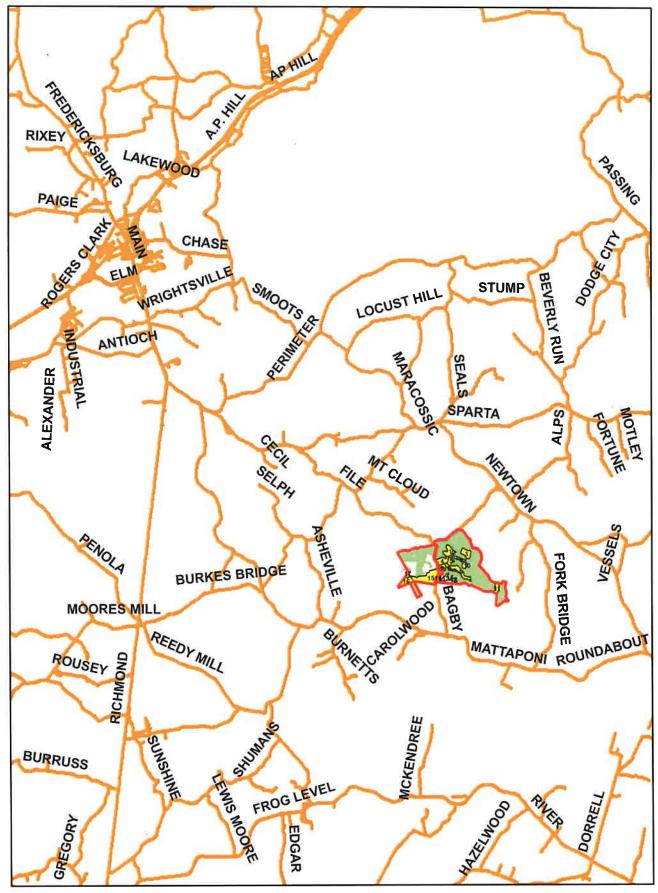
(Biosolids Land Application)



Scale: /"=2 Miles

6-20-19

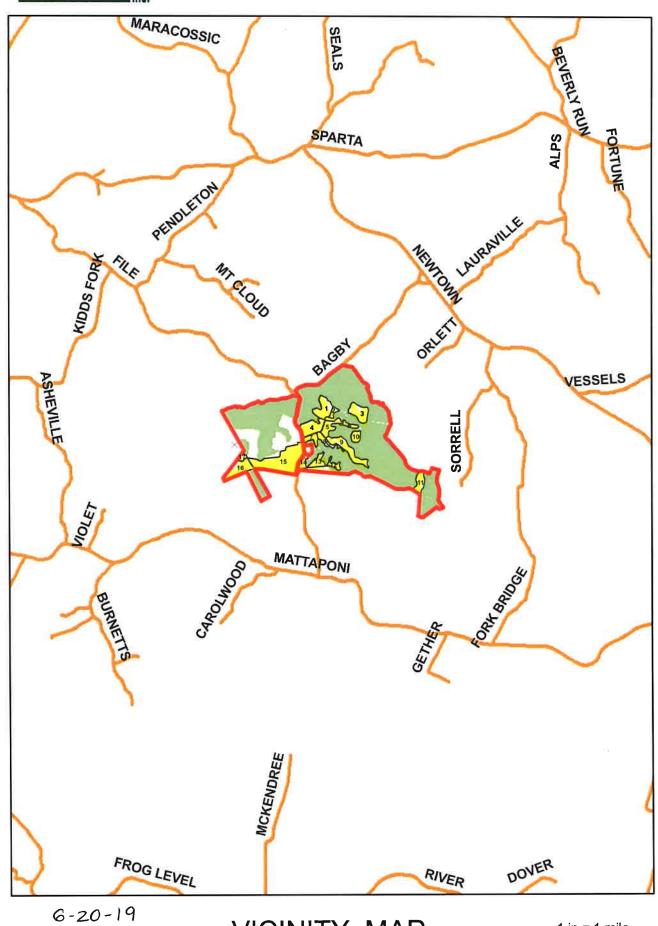






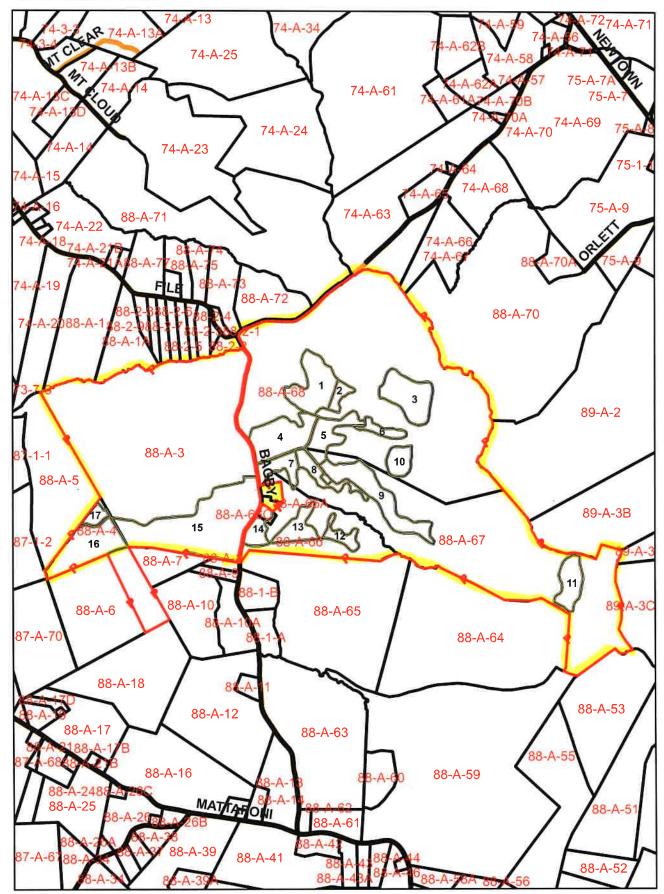
VICINITY MAP

1 in = 2 miles







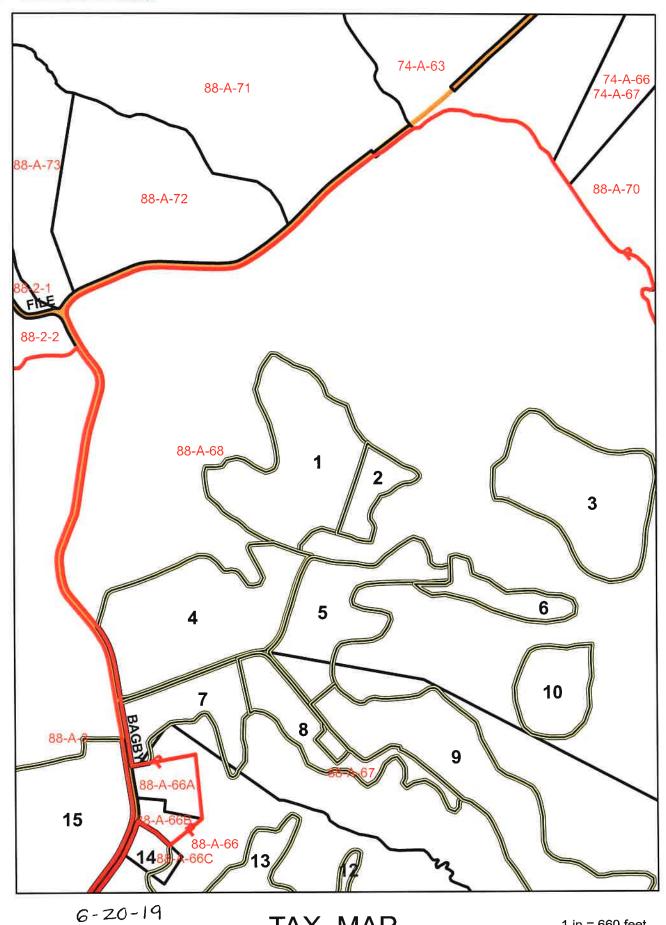




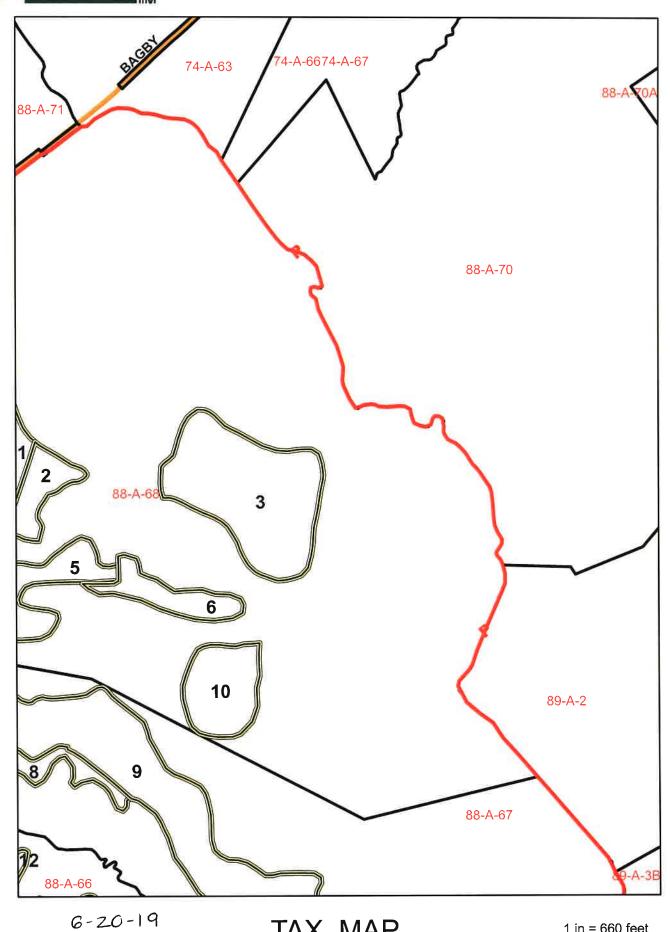
6-20-19

TAX MAP

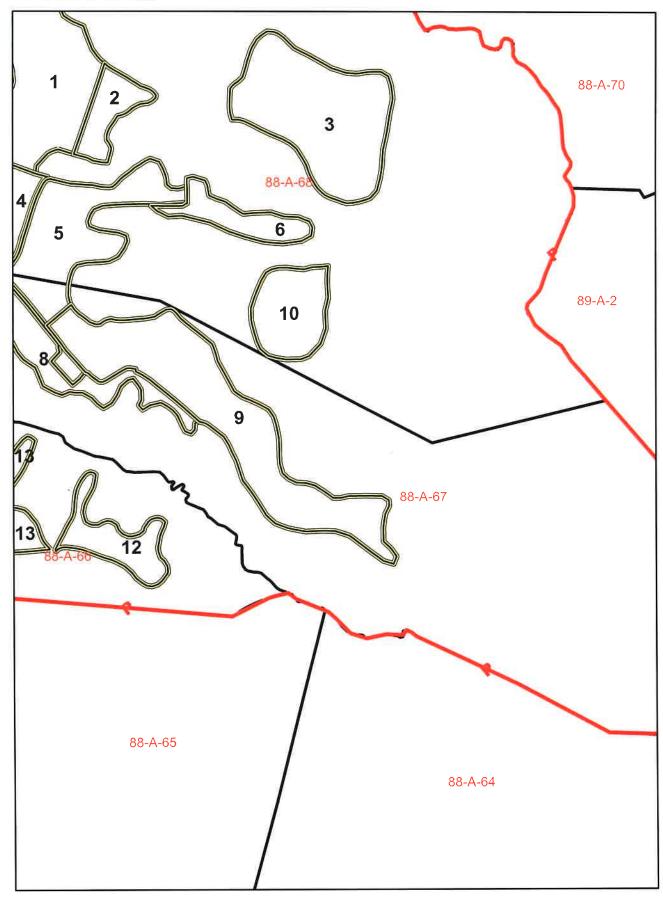
1 in = 2,000 feet



TAX MAP



TAX MAP

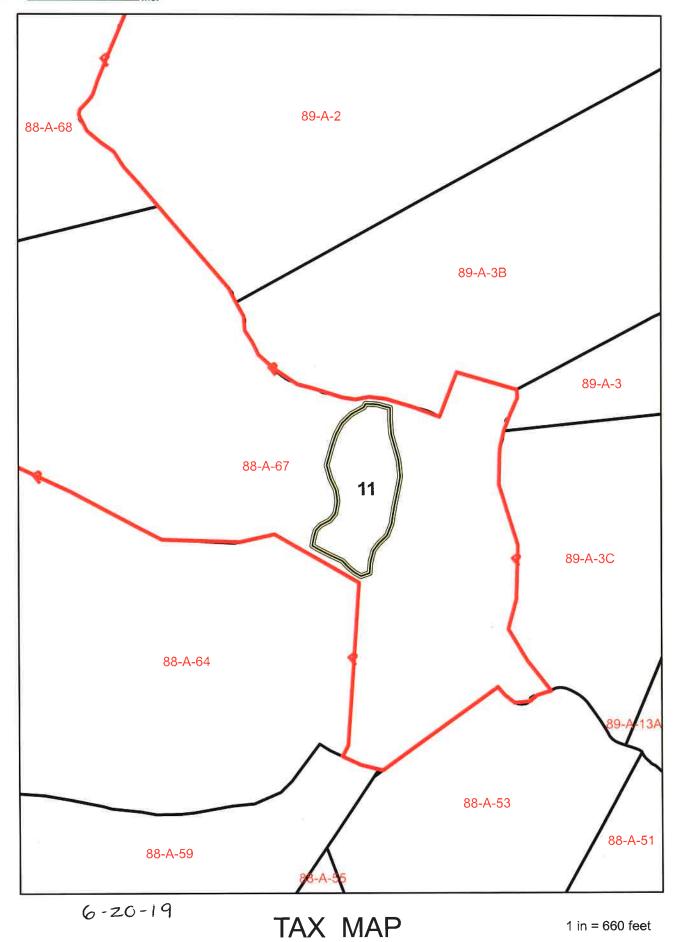


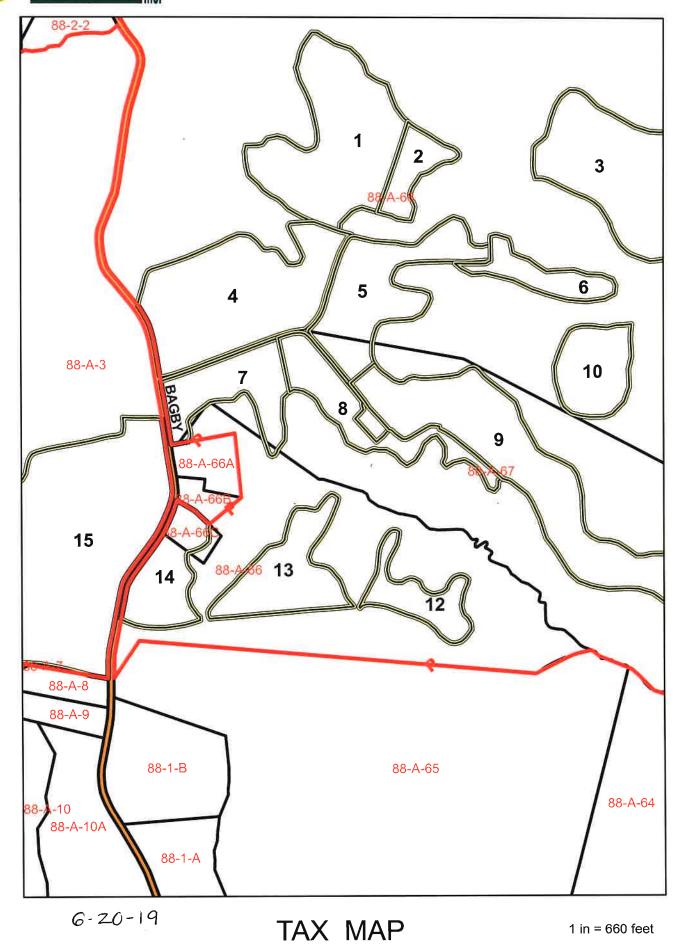


6-20-19

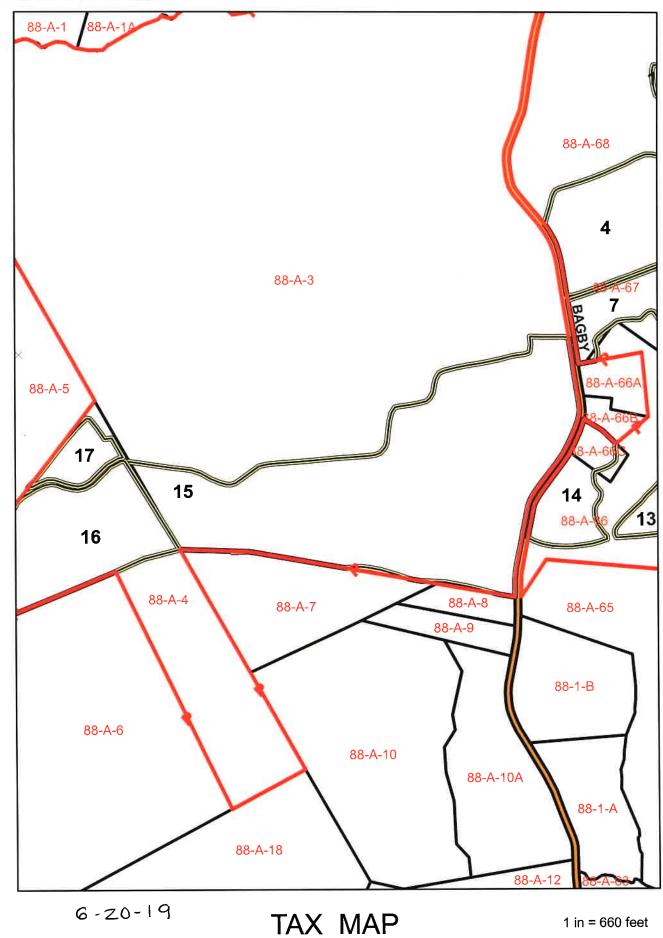
TAX MAP



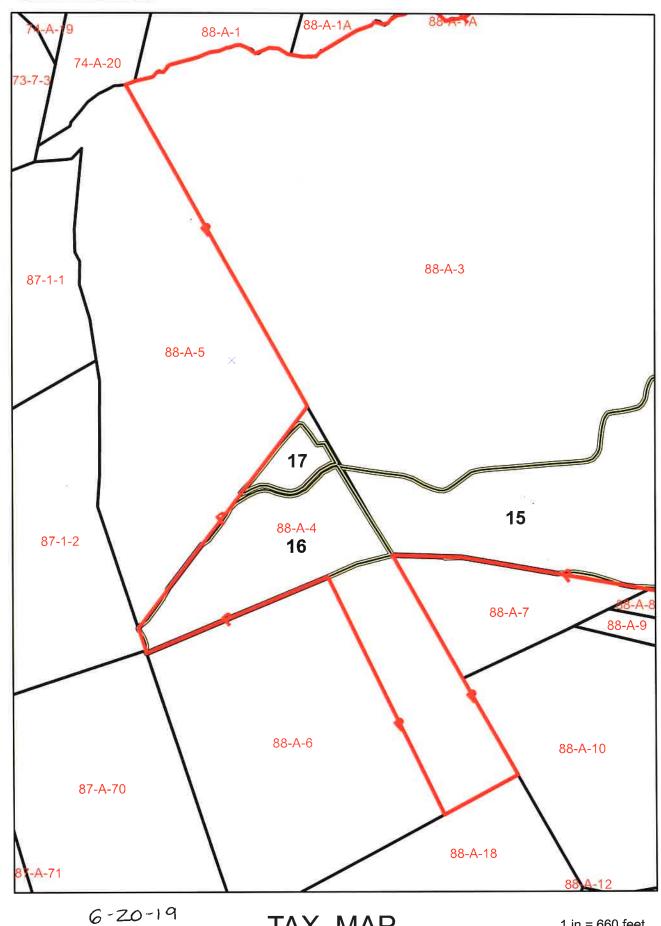






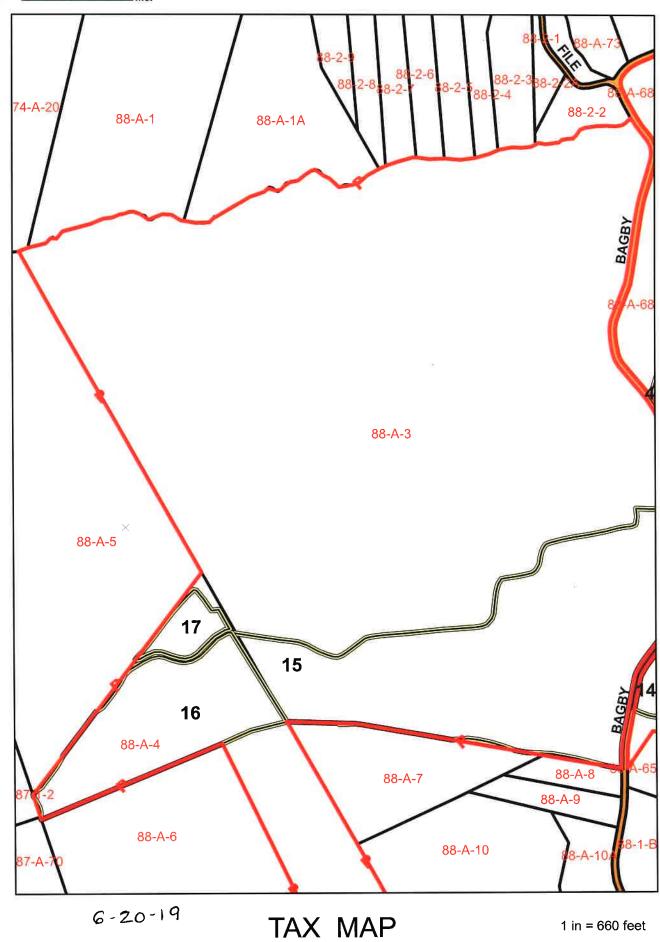






TAX MAP





## **ADJOINING LANDOWNERS**

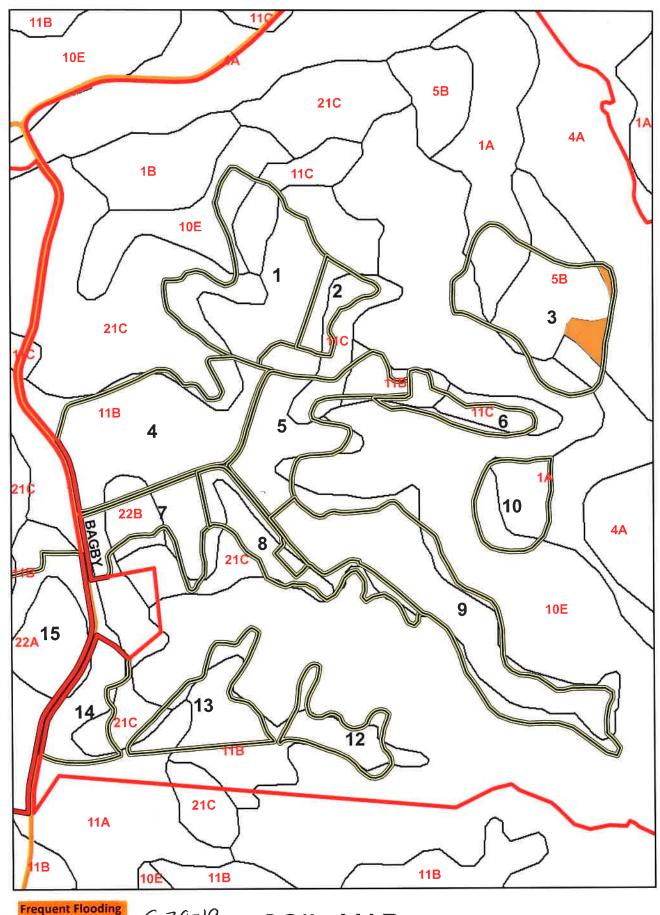
## CARL D. UPSHAW

## **CAROLINE COUNTY**

Tax Map	Parcel #	Owner Name(s)	
74-A	20	Warren L. Andrews	
	63	Mary Jo Lunoe and Patricia A. Atkins	
	66	Mary Jo Lunoe and Patricia A. Atkins	
	67	Mary Jo Lunoe and Patricia A. Atkins	
87-A	70	Timothy D. Varley and Christina Y. Gauthier	
87-1	2	Edwin T. Upshaw III and Katherine H.	
88-A 1 Walter		Walter H. Cummings and Kimberly A. Lynch	
	1A	Reginald W. Bennett	
	5	Carl D. Upshaw, Jr. and Edwin T. Upshaw III and Katherine H.	
	6	Benjamin Burruss Jeter	
	7	Edwin T. Upshaw III and Carl D. Upshaw, Jr.	
	8	Carl Douglas Upshaw, Jr.	
	9	Jane E. Groat	
	10	Carl D. Upshaw, Jr. and Edwin T. Upshaw III and Katherine H.	
	18	Five Poles Farm LLC	
	59	Ralph C. Gibson III and Glenn Gordson Gibson	
	64	Edwin T. Upshaw III Trustee	
	65	Edwin T. Upshaw III Trustee	
	66A	Charles Upshaw	
	66B	Charles Upshaw	
	66C	Charles Upshaw	
	70	Todd Beazley	
	71	Benjamin K. Adamson	
	72	Janet L. Moss and Michael C. Parker	
8	73	Leo Wayne and Linda Johnson	
88-1	В	Edwin T. Upshaw III and Katherine H.	

Tax Map	Parcel #	Owner Name(s)
88-2	1 2 2A 3 4 5 6 7 8 9	Jeweldene Christian Mary Jo Lunoe William C. Leadbetter and Taylor M. Stanley Charley W. Deyo, Jr. Mark J. and Claudia Depollo Damon L. Gray, Jr. and Kimberly L. Mary Gray Damon L. and Mary Gray Stanley A. Fields III and Jennifer E. Gray Samuel T. Frantum





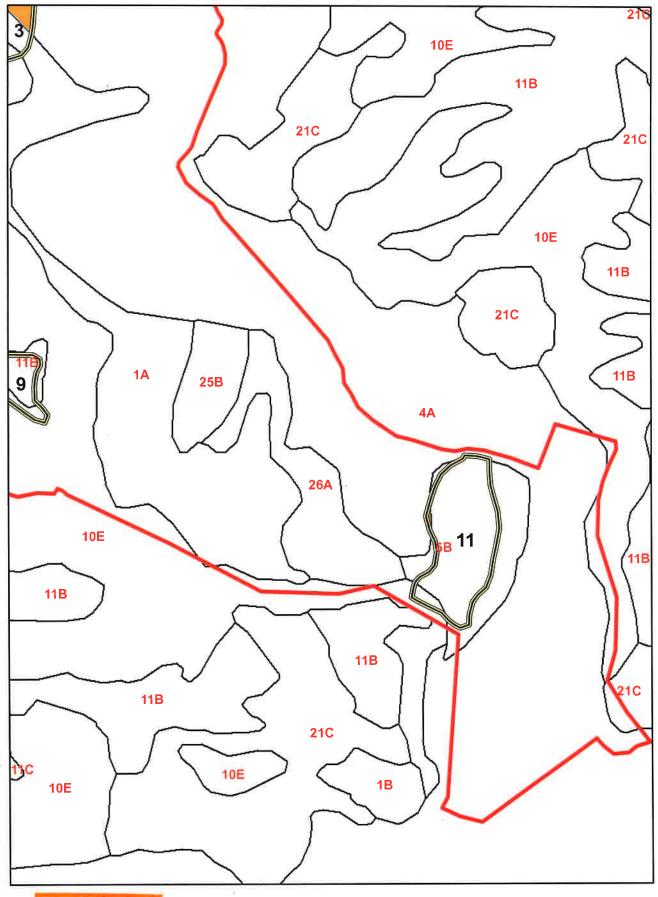


marked in Orange

6-20-19

SOIL MAP



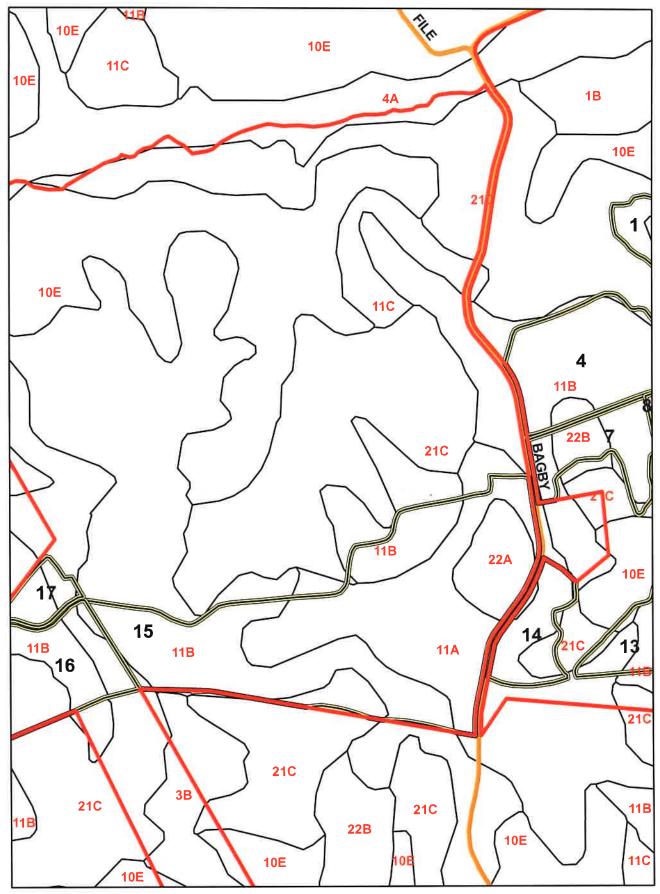




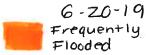
Frequent Flooding marked in Orange

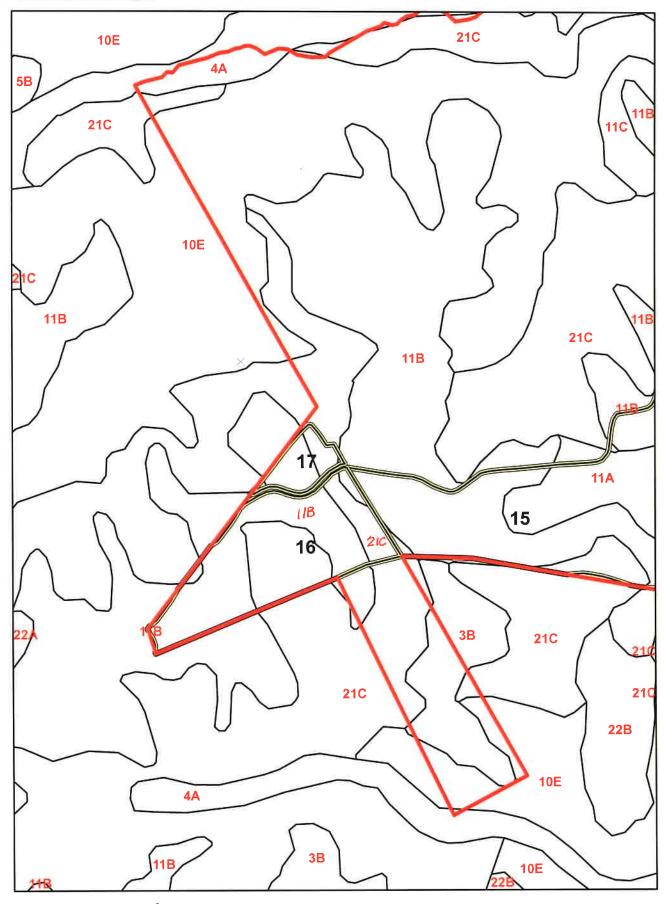
6-20-19 SOIL MAP











1



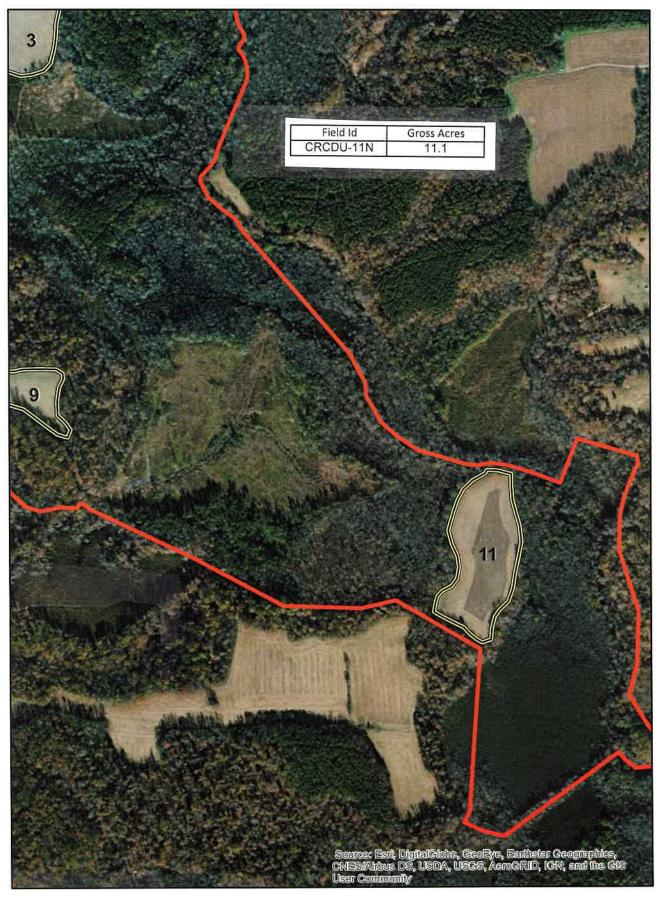
SOIL MAP







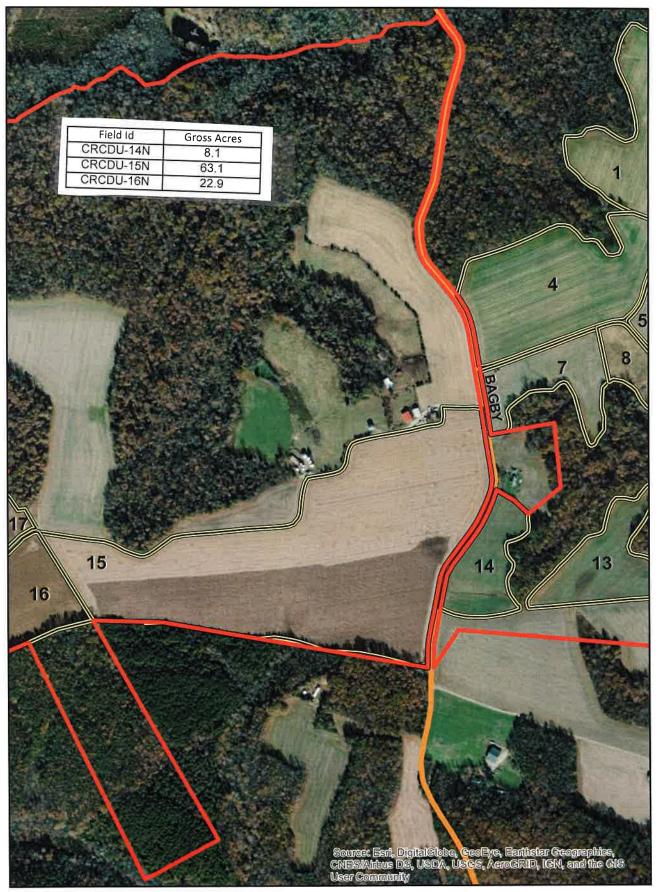








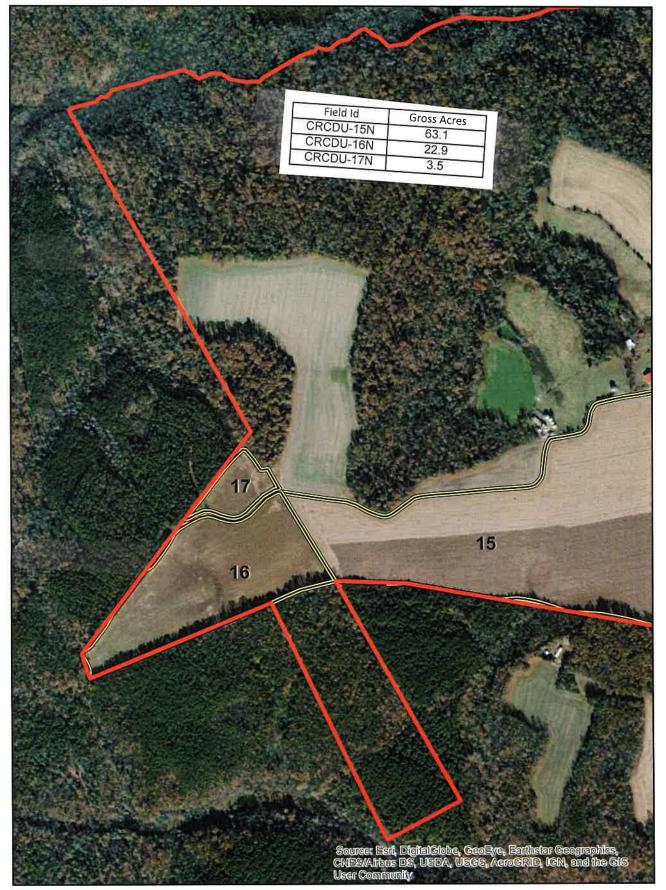






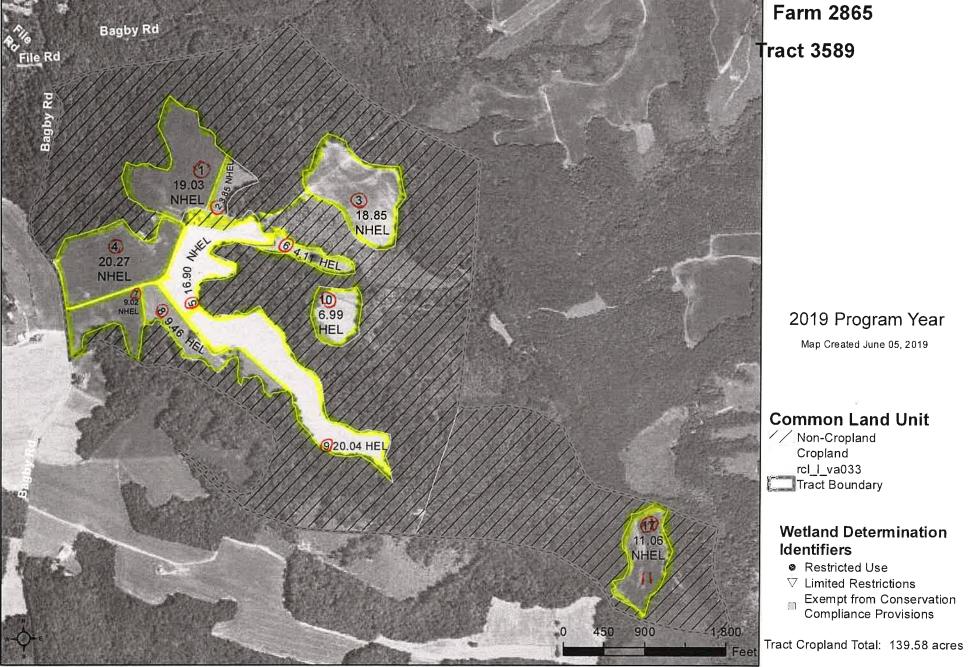




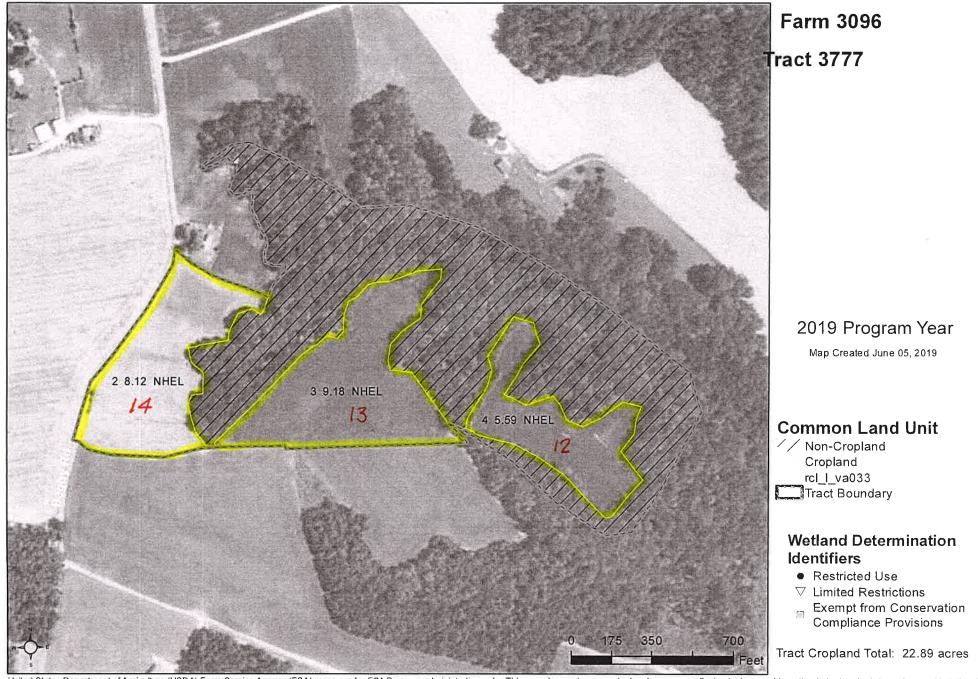




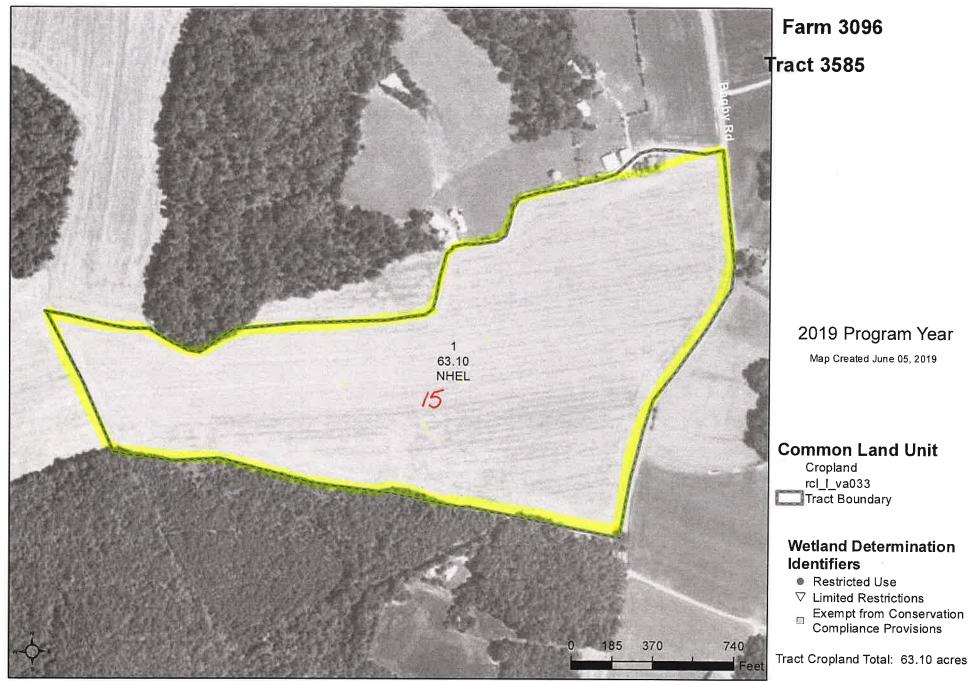


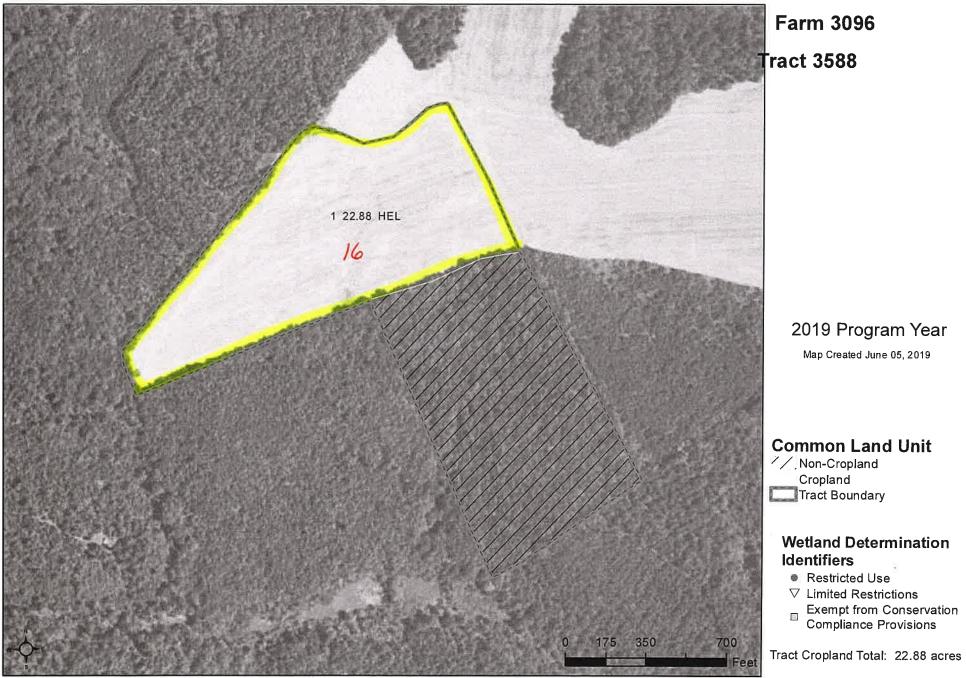


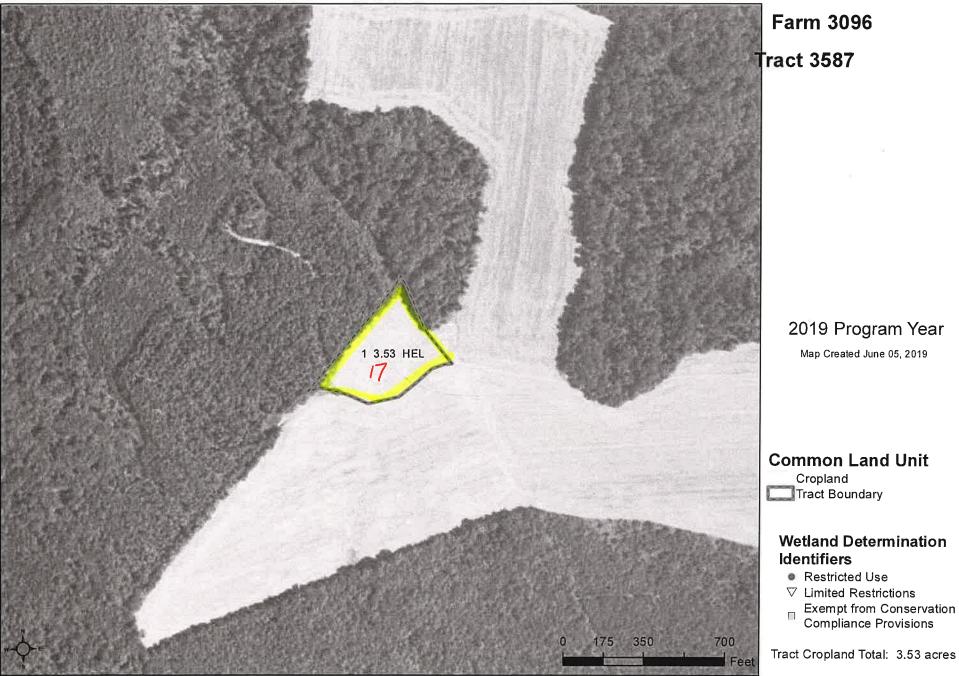








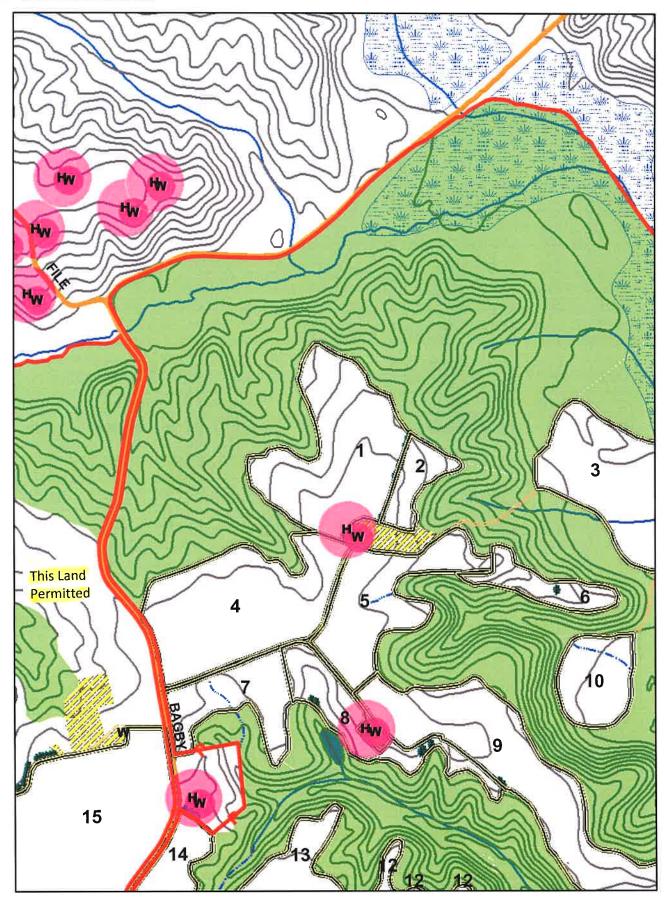




## **Legend For Site Plan**

Symbol	Feature	Minimum Setback
HW	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
w s	Well or Spring	100 feet from water supply wells or springs
~	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
ш	Wet Spot	
	Trees and Woods	
	Private Drive	
R	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
≡	Severely Eroded Spot	18 Inch minimum depth of soil
s A	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
-	State Road	10 feet from side of roadway
	Fence / Field Boundary	
_P _ P_ P_	Property Line	100 feet from property line *
SL S	Slope	15% maximum
	Hashed out Area	No application

<sup>\*</sup>Buffer can be reduced or waived upon written consent from landowner.





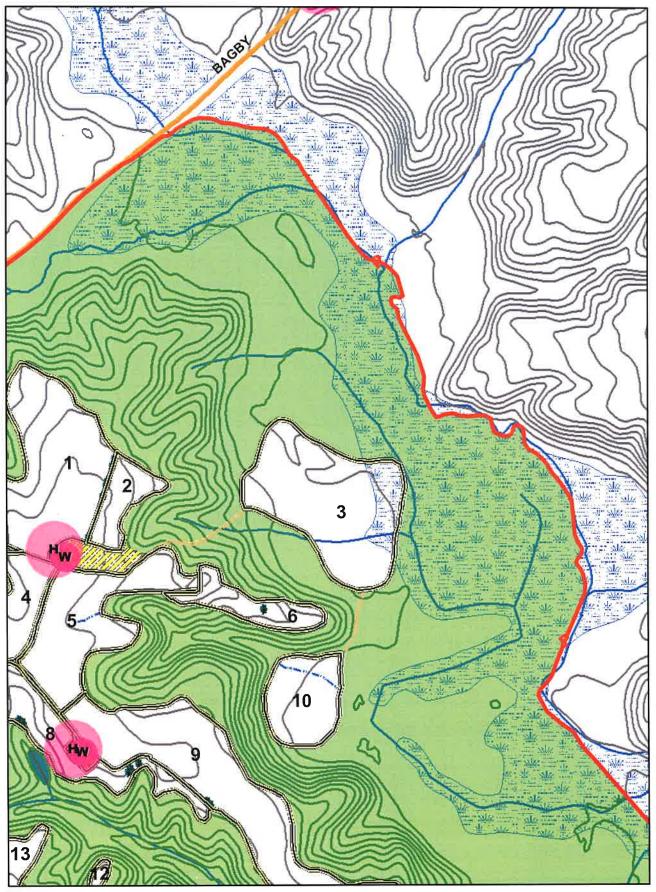
6-20-19

SITE PLAN

1 in = 660 feet

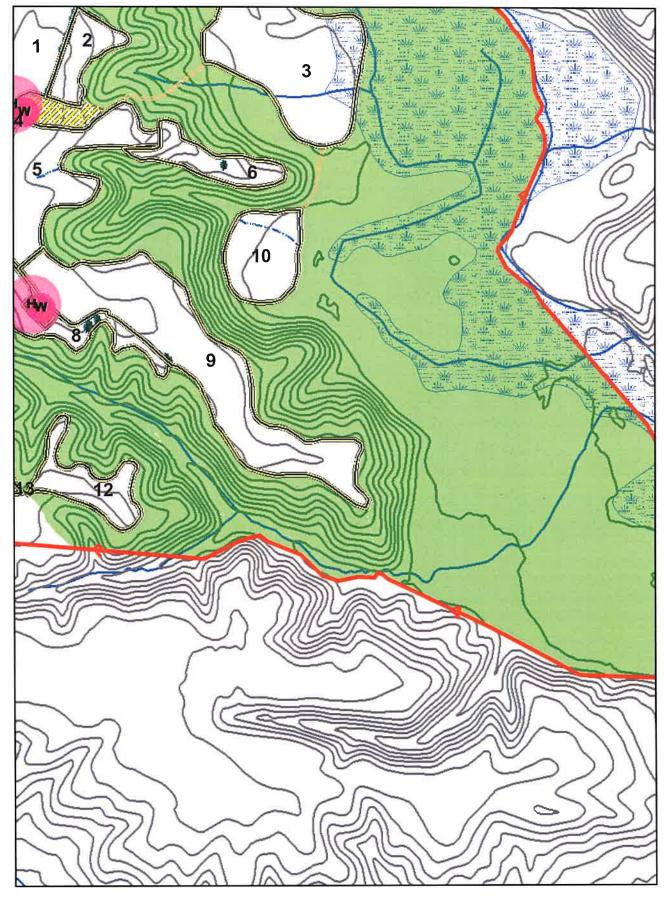








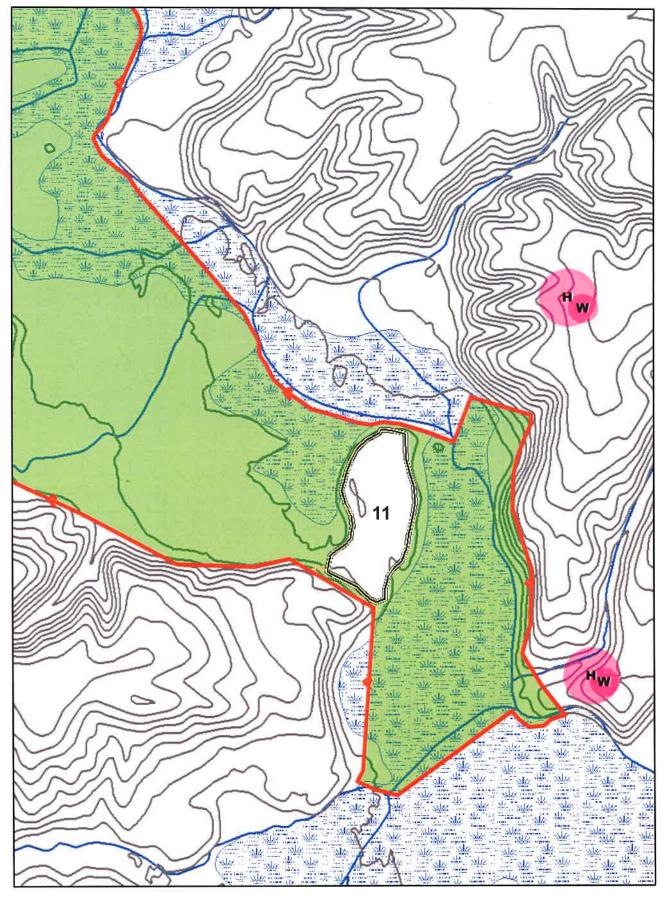






SITE PLAN

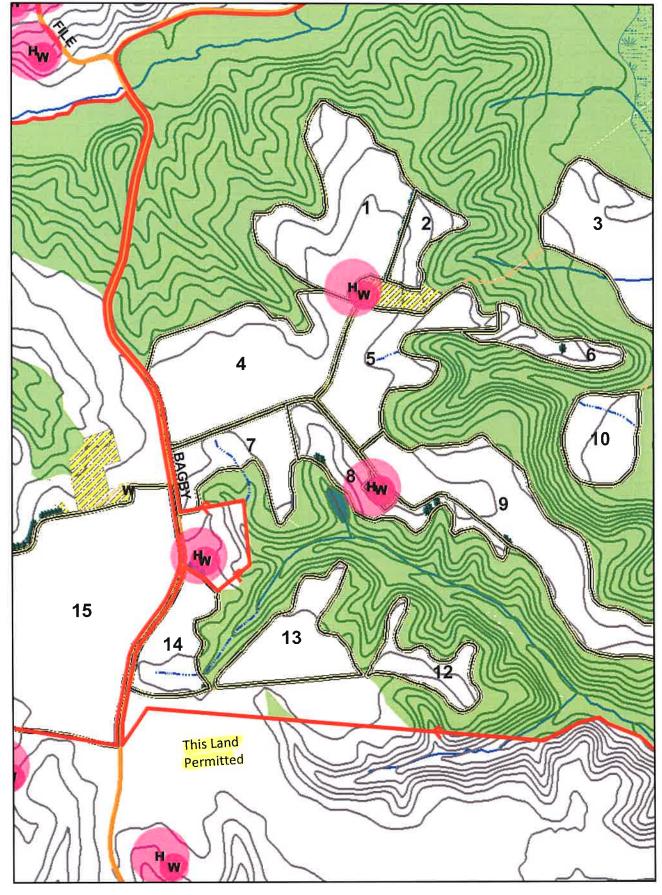






SITE PLAN

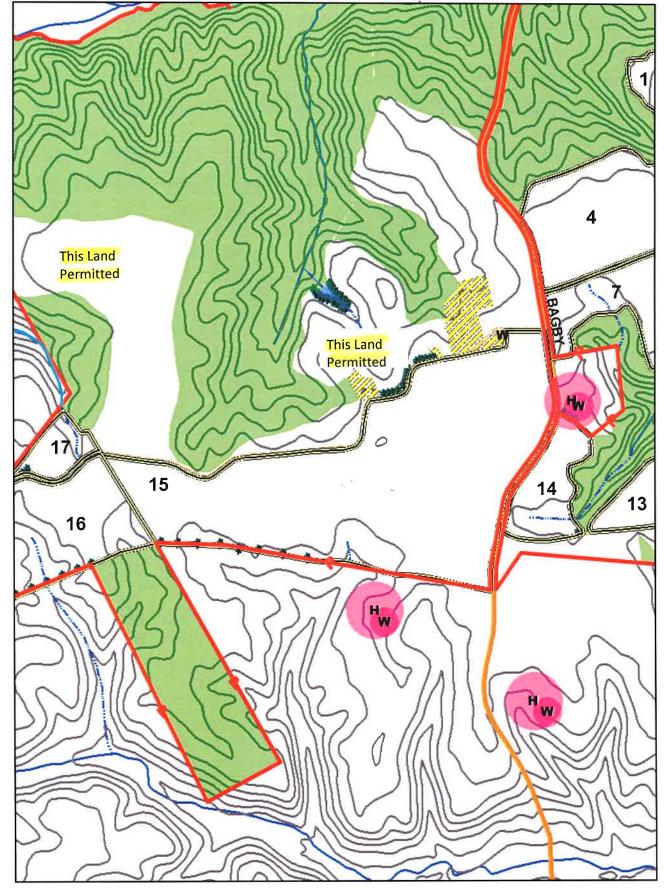






SITE PLAN

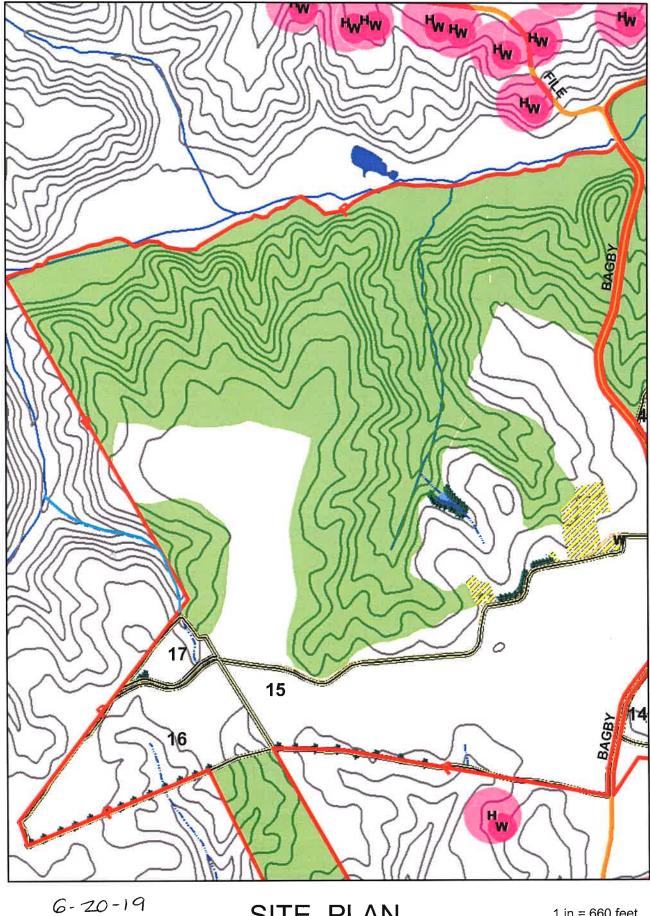




N

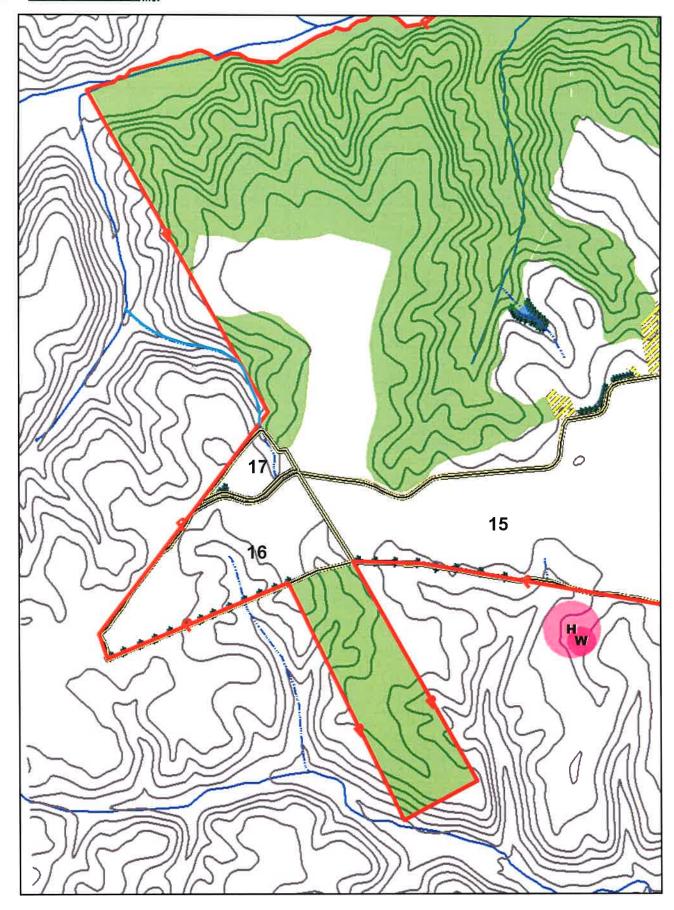
6-20-19

SITE PLAN





SITE PLAN





SITE PLAN

1 in = 660 feet



